

To: KHanson@ldftribe.com[KHanson@ldftribe.com]
Cc: Kamke, Sherry[Kamke.Sherry@epa.gov]; Egan, Robert[egan.robert@epa.gov]
From: Faust, Matt
Sent: Thur 11/10/2016 9:07:23 PM
Subject: FW: files used in the s2c2 webinar

Hi Kristen,

I heard back from Jason at S2C2 who tells me that the 4Dims have not been updated beyond the files that you referenced this morning. As you can see from the email below, he is noting that he performed the web session using a different program than the free 4Dim viewer that you and I use. I'm not sure if this can account for the difference that you are seeing – if there is something specific that the 4Dims are lacking, perhaps we can capture it in the next round of modeling?

--Matt

Matt Faust, P.G.
Project Manager/Geologist
Bristol Environmental Remediation Services, LLC
Phone : (907) 743-9346

From: Jason Ruf [mailto:jruf@s2c2inc.com]
Sent: Thursday, November 10, 2016 9:13 AM
To: Faust, Matt <mfaust@bristol-companies.com>
Subject: RE: files used in the s2c2 webinar

Matt,

I haven't updated the 4Dim files. I was using Studio for the WebX, which is the program that does all the analysis and display the 3DVA and also creates the 4Dim files. It was all the same data but a different platform for display compared to the 4Dims.

Regards

Jason

Jason Ruf

Senior Geologist/Manager Data Visualization Services

S2C2 inc.

5 Johnson Drive

Suite 12

Raritan, New Jersey 08869

Cell – 908-256-2710

From: Faust, Matt [<mailto:mfaust@bristol-companies.com>]

Sent: Thursday, November 10, 2016 1:01 PM

To: Jason Ruf <jruf@s2c2inc.com>

Subject: FW: files used in the s2c2 webinar

Hi Jason,

The attached 4dims are the ones you sent me on September 20. Were they the same files presented during the web session on October 11? If not, could you please send us updated versions?

Thank you,

--Matt

Matt Faust, P.G.

Project Manager/Geologist

Bristol Environmental Remediation Services, LLC

Phone : (907) 743-9346

From: Hanson, Kristen [<mailto:KHanson@ldftribe.com>]

Sent: Thursday, November 10, 2016 7:15 AM

To: egan.robert@epa.gov

Cc: kamke.sherry@epa.gov; Faust, Matt <mfaust@bristol-companies.com>

Subject: files used in the s2c2 webinar

Good Morning,

Please send the 4dim files that were presented in the S2C2 webinar. The files above appear to be an earlier version.

Kristen

From: Faust, Matt [<mailto:mfaust@bristol-companies.com>]
Sent: Thursday, September 29, 2016 1:53 PM
To: Hanson, Kristen
Cc: Egan, Robert
Subject: RE: Additional LIF data to Haskell Lake Model

Kristen,

Attached you should find the final 4dim files generated by S2C2. Note that some of these are titled DraftPreliminary, though it is my understanding that they are actually finalized.

--Matt

Matt Faust, P.G.
Project Manager/Geologist
Bristol Environmental Remediation Services, LLC
Phone : (907) 743-9346

From: Egan, Robert [<mailto:egan.robert@epa.gov>]
Sent: Thursday, September 29, 2016 10:47 AM
To: Faust, Matt <mfaust@bristol-companies.com>
Subject: FW: Additional LIF data to Haskell Lake Model

Matt,

Can you provide an answer to what Kristen is asking for in the message below?

Thank you.

Bob Egan

Corrective Action Manager

Underground Storage Tanks Section

RCRA Branch

EPA Region 5

(312) 886-6212

(312) 692-2911 (fax)

From: Hanson, Kristen [<mailto:KHanson@ldftribe.com>]

Sent: Thursday, September 29, 2016 1:41 PM

To: Egan, Robert <egan.robert@epa.gov>; Kamke, Sherry <Kamke.Sherry@epa.gov>

Subject: FW: Additional LIF data to Haskell Lake Model

Good Afternoon Bob,

Could you please provide the Tribe access to the current model 4dim files so that they can be uploaded to the EPA site webpage communication tool.

Kristen

From: Faust, Matt [<mailto:mfaust@bristol-companies.com>]

Sent: Wednesday, September 14, 2016 11:20 AM
To: Hanson, Kristen
Subject: RE: Additional LIF data to Haskell Lake Model

Kristen,

Thank you, to my eye it looks like the data is all there now. I'll check with Jason to make sure they don't need anything else.

--Matt

Matt Faust, P.G.
Project Manager/Geologist
Bristol Environmental Remediation Services, LLC
Phone : (907) 743-9346

From: Hanson, Kristen [<mailto:KHanson@ldftribe.com>]
Sent: Tuesday, September 13, 2016 4:49 PM
To: Faust, Matt <mfaust@bristol-companies.com>
Cc: jruf@s2c2inc.com
Subject: RE: Additional LIF data to Haskell Lake Model

Good Afternoon Matt,

Thank you for the information and Jason's contact information. The ftp site was updated this evening with the data files.

Kristen

Sent from my Verizon Wireless 4G LTE smartphone

----- Original message -----

From: "Faust, Matt" <mfaust@bristol-companies.com>

Date: 09/13/2016 1:02 PM (GMT-06:00)

To: "Hanson, Kristen" <KHanson@ldftribe.com>

Cc: egan.robert@epa.gov

Subject: RE: Additional LIF data to Haskell Lake Model

Hi Kristen,

Just an FYI, it looks like you have Jason Ruf's email address wrong in your email from Friday. Jason didn't receive this email until I forwarded it to him this morning. His correct email is jruf@s2c2inc.com.

I don't think it will be necessary for the LDF tribe to put S2C2 under contract for this task. They have indicated that there is sufficient budget remaining under their current subcontract with Bristol to incorporate the UVOST/LIF data into their model. It shouldn't take very much effort, considering they've already laid the groundwork, so it would probably be simplest to keep it all in one job. That wouldn't cause a problem for you, would it?

However, it looks like the data that is on the FTP site you sent is PDFs of the UVOST logs only. S2C2 will need the raw data or text/excel files with the actual data logs in order to incorporate the UVOST data into the model.

Thank you,

--Matt

Matt Faust, P.G.

Project Manager/Geologist

Bristol Environmental Remediation Services, LLC

Phone : (907) 743-9346

From: Hanson, Kristen [<mailto:KHanson@ldftribe.com>]
Sent: Friday, September 09, 2016 7:18 AM
To: ruf@s2c2inc.com
Cc: Faust, Matt <mfaust@bristol-companies.com>; egan.robert@epa.gov
Subject: Additional LIF data to Haskell Lake Model

Good Afternoon Jason,

LIF work was completed at the Haskell Lake site. I am interested in contracting your services to include this additional data in the Haskell Lake Work. Could you send a ballpark cost estimate so that I can execute a contract.

The LIF work was completed on Wednesday and Thursday. The survey work is being completed today. The data is being uploaded to Dakota's ftp site. The website login address and login is:

Username: colemaneng

Password: haskelllake221

FTP site address: <http://ftpfh.dakotatechnologies.com/~dakota/2016/0221.16>

Kristen Hanson

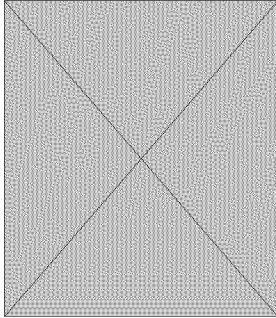
Environmental Specialist

Tribal Natural Resource Department

Lac du Flambeau Band of Lake Superior Chippewa Indians

Phone: (715)588-4290

Cell: (715)614-4644



From: Faust, Matt [<mailto:mfaust@bristol-companies.com>]
Sent: Tuesday, September 06, 2016 12:45 PM
To: Hanson, Kristen
Cc: egan.robert@epa.gov
Subject: RE: Data Clarification

Hi Kristen,

I hope that the email I sent a few minutes ago include the shapefiles that you needed – please let me know if not.

Jason Ruf's email address is: jruf@s2c2inc.com.

Good luck with your LIF program this week!

--Matt

Matt Faust, P.G.

Project Manager/Geologist

Bristol Environmental Remediation Services, LLC

Phone : (907) 743-9346

From: Hanson, Kristen [<mailto:KHanson@ldftribe.com>]

Sent: Tuesday, September 06, 2016 9:33 AM

To: Faust, Matt <mfaust@bristol-companies.com>

Cc: egan.robert@epa.gov

Subject: RE: Data Clarification

Good Morning Matt,

Thanks for the pdf map example. You guessed right, the shape files for the data shown on the map you sent are the files I'm looking for.

I have been out of the loop for a bit, so I wasn't sure if there was a call planned with S2C2, it looked like one was being planned in the old emails. I sure do appreciate inclusion in the next web session, after the LIF data. I will need to get the data into the model, so I will need Jason's contact information.

Hope all is well in the great state of Alaska!

Kristen

From: Faust, Matt [<mailto:mfaust@bristol-companies.com>]

Sent: Tuesday, September 06, 2016 11:23 AM

To: Hanson, Kristen

Cc: Egan, Robert

Subject: RE: Data Clarification

Good morning Kristen,

I've attached a table with analytical results. These are pretty fresh and haven't been reviewed yet.

I've also attached a PDF of a site map that has all the boring locations – this is what you need a shapefile for, correct? I'll ask Noyuk this morning to generate one for you.

I can ask S2C2 to set up a web session. Would you care to wait until they've incorporated your LIF data into the model?

--Matt

Matt Faust, P.G.

Project Manager/Geologist
Bristol Environmental Remediation Services, LLC
Phone : (907) 743-9346

From: Egan, Robert [<mailto:egan.robert@epa.gov>]

Sent: Tuesday, September 06, 2016 7:32 AM

To: Faust, Matt <mfaust@bristol-companies.com>

Subject: FW: Data Clarification

Matt,

See below. Can you provide this to Kristen?

Bob Egan

Corrective Action Manager

Underground Storage Tanks Section

RCRA Branch

EPA Region 5

(312) 886-6212

(312) 692-2911 (fax)

From: Hanson, Kristen [<mailto:KHanson@ldftribe.com>]

Sent: Tuesday, September 06, 2016 10:24 AM

To: Egan, Robert <egan.robert@epa.gov>

Cc: Faust, Matt (mfaust@bristol-companies.com) <mfaust@bristol-companies.com>

Subject: Data Clarification

Bob,

Bristol did a wonderful job displaying several datasets (2016 Bristol Borehole, 2015 REI borehole, Lac du Flambeau Well, Monitoring Well, and Vertical Aquifer Sample) in their March 2016 figure that we used in the field during the MiHPT work. In addition to the MiHPT shapefile from the survey work, please send the shapefiles from the March figure.

Thanks,

Kristen

From: Egan, Robert [<mailto:egan.robert@epa.gov>]

Sent: Tuesday, September 06, 2016 10:13 AM

To: Hanson, Kristen

Cc: Kamke, Sherry

Subject: RE: MiHPT and LIF data for Tower

Hi Kristen,

I do not have the lab data yet. I will ask Bristol if they have heard anything yet. I will also ask them to send the Shape files to you.

There is no session yet scheduled with S2C2. I will check with Bristol on how to get this arranged. I know that Tom Kady is out until later this month for vacation. I would like him to participate in this if possible. He also suggested that we have REI arrange for their subcontractor to provide an overview session with their own interpretation of the data.

I hope the work goes well this week.

Bob Egan

Corrective Action Manager

Underground Storage Tanks Section

RCRA Branch

EPA Region 5

(312) 886-6212

(312) 692-2911 (fax)

From: Hanson, Kristen [<mailto:KHanson@ldftribe.com>]

Sent: Tuesday, September 06, 2016 10:03 AM

To: Egan, Robert <egan.robert@epa.gov>

Cc: Faust, Matt (mfaust@bristol-companies.com) <mfaust@bristol-companies.com>

Subject: RE: MiHPT and LIF data for Tower

Good Morning Bob,

Is there a web session with S2C2 scheduled?

Could you ask Bristol for

- 1) Shape files for the MiHpt borings
- 2) Lab Analytical for the sampled wells

I am preparing for LIF work tomorrow.

Thank you,

Kristen Hanson

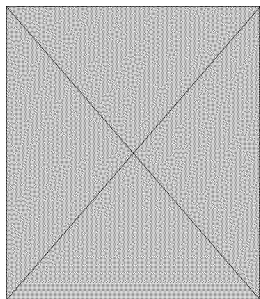
Environmental Specialist

Tribal Natural Resource Department

Lac du Flambeau Band of Lake Superior Chippewa Indians

Phone: (715)588-4290

Cell: (715)614-4644



From: Faust, Matt [<mailto:mfaust@bristol-companies.com>]
Sent: Wednesday, August 24, 2016 12:17 PM
To: Egan, Robert
Cc: Kady, Thomas; Hanson, Kristen
Subject: RE: MiHPT and LIF data for Tower

Bob,

I've sent an email to S2C2 to see about getting those 4DIM files. Also, I forgot to mention that Jason offered to host another web session for anybody that would like to see what he's been working on, though he did say he'd be out most of the rest of the week, returning next week.

--Matt

Matt Faust, P.G.
Project Manager/Geologist
Bristol Environmental Remediation Services, LLC
Phone : (907) 743-9346

From: Egan, Robert [<mailto:egan.robert@epa.gov>]
Sent: Wednesday, August 24, 2016 5:39 AM

To: Faust, Matt <mfaust@bristol-companies.com>
Cc: Kady, Thomas <Kady.Thomas@epa.gov>; KHanson@ldftribe.com
Subject: FW: MiHPT and LIF data for Tower

Matt:

Please see Tom's message below and let me know when we can see the information he references.

Thank you.

Bob Egan

Corrective Action Manager

Underground Storage Tanks Section

RCRA Branch

EPA Region 5

(312) 886-6212

(312) 692-2911 (fax)

From: Kady, Thomas
Sent: Wednesday, August 24, 2016 8:23 AM
To: Egan, Robert <egan.robert@epa.gov>
Cc: KHanson@ldftribe.com
Subject: Re: MiHPT and LIF data for Tower

I agree with all of Jason and Matt's suggestions. I would like to see S2C2's visualization for the MIHPT work. We can wait for the final report until after the LIF work, but it would be good to see the 4-dims as soon as they are ready. That will help guide the LIF work.

Tom

Sent from my iPhone

On Aug 24, 2016, at 7:54 AM, Egan, Robert <egan.robert@epa.gov> wrote:

Kristen and Tom:

Please see Matt's message below with some recommendations from S2C2 on LIF locations.

I do not mind waiting to include the LIF data into the S2C2 model. Please let me know what you think about it and I will pass your messages on to Matt.

Thank you

Bob Egan

Corrective Action Manager

Underground Storage Tanks Section

RCRA Branch

EPA Region 5

(312) 886-6212

(312) 692-2911 (fax)

From: Faust, Matt [<mailto:mfaust@bristol-companies.com>]

Sent: Tuesday, August 23, 2016 3:41 PM

To: Egan, Robert <egan.robert@epa.gov>

Cc: Edwards, Christine <Edwards.Christine@epa.gov>; Ruth, Scott <sruth@bristol-

[companies.com](#)>

Subject: MiHPT and LIF data for Tower

PLEASE NOTE THE EPA AND CONTRACTORS ARE RECEIVING THIS EMAIL

Hi Bob,

I wanted to let you know that I had a web meeting with S2C2 (our MiHPT data visualization contractor) this morning and got to see how their model is coming together. In general I would say that it's impressive.

We talked about how the LDF Tribe has an LIF study planned for next week and considered whether S2C2 should hold off on finalizing their report incorporate the pending LIF data into the model. I thought that would probably be worth the wait but thought I better check with you and potentially Kristen.

In regards to suggestions for objectives for the LIF study, Jason (from S2C2) thought the probes would be best used in the source area (as I believe Kristen is planning) with a special emphasis on finding the bottom of the impacted zone. LIF will be most effective in the source area because it will not see dissolved phase contamination at all.

The other suggestion that Jason had was to perhaps drive LIF probes at the same locations as MiHPT locations 14 and 15. Both of those probes had some FID response at a shallower depth than expected (10-16 feet) that was not associated with significant PID response. In both borings there was relative high in HPT pressure in these intervals as well, and S2C2 is question whether they may be some sort of matrix effect. If LDF has the time available during their LIF study, it might be worth checking out these two spots. It would be even better if soil samples could be collected from these intervals.

Thank you,

--Matt

Matt Faust, P.G.

Project Manager/Geologist
Bristol Environmental Remediation Services, LLC
111 W. 16th Avenue, Third Floor
Anchorage, AK 99501-5109
Phone : (907) 743-9346
FAX : (907) 563-6713
mfaust@bristol-companies.com
<http://www.bristol-companies.com/>

CONFIDENTIAL NOTICE: This document is for the sole purpose of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure, or distribution is prohibited. If you are not the intended recipient, please contact the sender and destroy all copies of the original document.

--

CONFIDENTIAL NOTICE: This document is for the sole purpose of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure, or distribution is prohibited. If you are not the intended recipient, please contact the sender and destroy all copies of the original document.

--

CONFIDENTIAL NOTICE: This document is for the sole purpose of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure, or distribution is prohibited. If you are not the intended recipient, please contact the sender and destroy all copies of the original document.

--

CONFIDENTIAL NOTICE: This document is for the sole purpose of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure, or distribution is prohibited. If you are not the intended recipient, please contact the sender and destroy all copies of the original document.

--

CONFIDENTIAL NOTICE: This document is for the sole purpose of the intended recipient(s) and may contain confidential and privileged information. Any unauthorized review, use, disclosure, or distribution is prohibited. If you are not the intended recipient, please contact the sender and destroy all copies of the original document.

--